

CLAIMS

What is claimed is:

1. An instrument for distracting a disc space between adjacent vertebrae and simultaneously preparing endplates of the vertebrae, the instrument comprising:
 - a body having opposing upper and lower surfaces separated by curved side surfaces which extend between a posterior end of the body and an anterior end of the body;
 - a first plurality of teeth extending across the upper surface of the body, the first plurality of teeth angling back toward the anterior end of the body; and
 - a second plurality of teeth extending across the lower surface of the body, the second plurality of teeth angling back toward the anterior end of the body.
2. The instrument according to claim 1, wherein the upper and lower surfaces taper posteriorly such that the body have a thickness that decreases from the anterior end to the posterior end.
3. The instrument according to claim 1, further comprising an inserter removably coupled to the body.
4. The instrument according to claim 1, wherein the first and second plurality of teeth include anterior wedge surfaces and posterior shovel surfaces.

5. The instrument according to claim 4, wherein the first and second plurality of teeth further include arcuate root surfaces.

6. The instrument according to claim 4, wherein the wedge surfaces and the shovel surfaces intersect to define cutting edges.

7. The instrument according to claim 4, wherein the wedge surfaces are angled back at an angle of about 60°, as measured from an imaginary line extending perpendicular to an axis of the body, and the shovel surfaces are angled back at an angle of about 10°, as measured from the imaginary line.

8. The instrument according to claim 1, wherein the upper and lower surfaces taper posteriorly at an angle from a posterior-most pair of the first and second plurality of teeth such that the body has a thickness, as measured between edges of the first and second plurality of teeth, that decreases from an anterior-most pair of the first and second plurality of teeth to the posterior-most pair of the first and second plurality of teeth.

9. The instrument according to claim 8, wherein the angle is about 7 degrees.

10. The instrument according to claim 1, wherein the body defines a broach.

11. A system for distracting a disc space between adjacent vertebrae and simultaneously preparing endplates of the vertebrae, the system comprising:

at least two differently dimensioned instruments, each of the instruments including:

a body having opposing upper and lower surfaces separated by curved side surfaces which extend between a posterior end of the body and an anterior end of the body;

a first plurality of teeth extending across the upper surface of the body, the first plurality of teeth angling back toward the anterior end of the body; and

a second plurality of teeth extending across the lower surface of the body, the second plurality of teeth angling back toward the anterior end of the body.

12. The system according to claim 11, wherein the upper and lower surfaces of the body of each instrument taper posteriorly such that the body has a thickness that decreases from the anterior end to the posterior end, thereby defining an average thickness, the body of each instrument having an incrementally different average thickness.

13. The system according to claim 11, further comprising an inserter removably coupled to the body of each instrument.

14. The system according to claim 11, wherein the first and second plurality of teeth include anterior wedge surfaces and posterior shovel surfaces.

15. The system according to claim 14, wherein the first and second plurality of teeth further include arcuate root surfaces.

16. The system according to claim 14, wherein the wedge surfaces and the shovel surfaces intersect to define cutting edges.

17. The system according to claim 14, wherein the wedge surfaces are angled back at an angle of about 60°, as measured from an imaginary line extending perpendicular to an axis of the body, and the shovel surfaces are angled back at an angle of about 10°, as measured from the imaginary line.

18. The system according to claim 11, wherein the upper and lower surfaces taper posteriorly at an angle from a posterior-most pair of the first and second plurality of teeth such that the body of each instrument has a thickness, as measured between edges of the first and second plurality of teeth, that decreases from an anterior-most pair of the first and second plurality of teeth to the posterior-most pair of the first and second plurality of teeth, thereby defining an average thickness, the body of each instrument having an incrementally different average thickness.

19. The system according to claim 18, wherein the angle is about 7 degrees.

20. The system according to claim 11, wherein the body defines a broach.

21. An instrument for distracting a disc space between adjacent vertebrae and simultaneously preparing endplates of the vertebrae, the instrument comprising:

a body having opposing upper and lower surfaces separated by curved side surfaces which extend between a posterior end of the body and an anterior end of the body; a first plurality of ratcheting teeth extending across the upper surface of the body; and a second plurality of ratcheting teeth extending across the lower surface of the body.

22. The instrument according to claim 21, wherein the upper and lower surfaces taper posteriorly such that the body has a thickness that decreases from the anterior end to the posterior end.

23. The instrument according to claim 21, further comprising an inserter removably coupled to the body.

24. The instrument according to claim 21, wherein the first and second plurality of teeth include anterior wedge surfaces and posterior shovel surfaces.

25. The instrument according to claim 24, wherein the first and second plurality of teeth further include arcuate root surfaces.

26. The instrument according to claim 24, wherein the wedge surfaces and the shovel surfaces intersect to define cutting edges.

27. The instrument according to claim 24, wherein the wedge surfaces are angled back toward the anterior end of the body at an angle of about 60°, as measured from an

imaginary line extending perpendicular to an axis of the body, and the shovel surfaces are angled back toward the anterior end of the body at an angle of about 10°, as measured from the imaginary line.

28. The instrument according to claim 21, wherein the upper and lower surfaces taper posteriorly at an angle from a posterior-most pair of the first and second plurality of teeth such that the body has a thickness, as measured between edges of the first and second plurality of teeth, that decreases from an anterior-most pair of the first and second plurality of teeth to the posterior-most pair of the first and second plurality of teeth.

29. The instrument according to claim 28, wherein the angle is about 7 degrees.

30. The instrument according to claim 21, wherein the body defines a broach.

31. A system for distracting a disc space between adjacent vertebrae and simultaneously preparing endplates of the vertebrae, the system comprising:
at least two differently dimensioned instruments, each of the instruments including:
a body having opposing upper and lower surfaces separated by curved side surfaces which extend between a posterior end of the body and an anterior end of the body;
a first plurality of ratcheting teeth extending across the upper surface of the body;
and

a second plurality of ratcheting teeth extending across the lower surface of the body.

32. The system according to claim 31, wherein the upper and lower surfaces of the body of each instrument taper posteriorly such that the body has a thickness that decreases from the anterior end to the posterior end, thereby defining an average thickness, the body of each instrument having an incrementally different average thickness.

33. The system according to claim 31, further comprising an inserter removably coupled to the body.

34. The system according to claim 31, wherein the first and second plurality of teeth include anterior wedge surfaces and posterior shovel surfaces.

35. The system according to claim 34, wherein the first and second plurality of teeth further include arcuate root surfaces.

36. The system according to claim 34, wherein the wedge surfaces and the shovel surfaces intersect to define cutting edges.

37. The system according to claim 34, wherein the wedge surfaces are angled back at an angle of about 60°, as measured from an imaginary line extending perpendicular to an axis of

the body, and the shovel surfaces are angled back at an angle of about 10°, as measured from the imaginary line.

38. The system according to claim 31, wherein the upper and lower surfaces taper posteriorly at an angle from a posterior-most pair of the first and second plurality of teeth such that the body of each instrument has a thickness, as measured between edges of the first and second plurality of teeth, that decreases from an anterior-most pair of the first and second plurality of teeth to the posterior-most pair of the first and second plurality of teeth, thereby defining an average thickness, the body of each instrument having an incrementally different average thickness.

39. The system according to claim 38, wherein the angle is about 7 degrees.

40. The system according to claim 31, wherein the body defines a broach.